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**Iwamoto**(10) **Pub. No.: US 2019/0302404 A1**(43) **Pub. Date: Oct. 3, 2019**(54) **ZOOM LENS AND IMAGE PICKUP  
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**ABSTRACT**(21) Appl. No.: **16/368,591**(22) Filed: **Mar. 28, 2019**(30) **Foreign Application Priority Data**

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A zoom lens includes, in order from an object side: a positive first unit; a negative second unit; and a rear group. The rear group includes: a positive object-side unit, which is arranged closest to the object side; a negative rear-side unit, which is arranged closest to the image side in the zoom lens; and a negative middle unit, which is arranged adjacent to the rear-side unit and on the object side of the rear-side unit. The first unit, the middle unit, and the rear-side unit are configured to move toward the object side during zooming from a wide angle end. Further, focal lengths of the second unit and the middle unit, movement amounts of the middle unit, the rear-side unit, the object-side unit, and the first unit during zooming from the wide angle end to the telephoto end are each appropriately set.

